

5 "Screw element"

Abstract

10 The present invention relates to a screw element (1),
comprising a threaded shank (2) and a screw tip (4),
which is configured on one shank end, and a screw head
(5), which is configured on the opposite shank end and
has a force-application means (7), and having a screw
15 thread (12) which runs on the threaded shank (2) and
the screw tip (4). The screw tip (4), when viewed in
the screw-in direction (Z), has a front first tip
portion (4a), which tapers off towards the end of the
screw element, and a second tip portion (4b), which is
20 adjacent to said first tip portion (4a), having, when
viewed in the cross section, a polygonal cross section,
the enveloping circle diameter (d_h) of which is larger
than a core diameter (d_k) of the first tip portion (4a).
The first tip portion (4a) has a circular cross
section. On the transition between the first tip
25 portion (4a) and the second tip portion (4b), at least
one end edge face (9) which, in relation to a screw
centre axis (X-X), is radially oriented in the sense of
a diameter enlargement and which terminates in a vertex
(15) of the polygonal cross section, which lies on the
30 enveloping circle of the second tip portion (4b) is
configured. The screw thread is configured without
interruption over the first and second tip portions
(4a, 4b) of the screw tip (4).

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Fig. 1